

**In the Claims**

**1. (currently amended)** A process for preparing a cycloorganylphosphane of **formula I**



by reaction of a dihalo(organyl)phosphane of the formula  $R^1PHal_2$ ,

wherein

$R^1$  is  $C_1-C_{12}$ alkyl;  $C_3-C_{12}$ cycloalkyl, aryl or heteroaryl,

$Hal$  is F, Cl, Br or I, and

$n$  is a number from 3 to 20,

with

a) activated zinc in an organic solvent, or with

b) sodium~~an alkali metal or alkaline earth metal~~ in a non-polar organic solvent in the presence of tetramethylethylenediamine~~an activator selected from the group consisting of ethers, polyethers, amines, polyamines, aromatic N-heterocycles and carbonic acid derivatives~~, wherein the ratio by volume of non-polar solvent to tetramethylethylenediamine~~activator~~ is from 10 : 0.1 to 10 : 5.

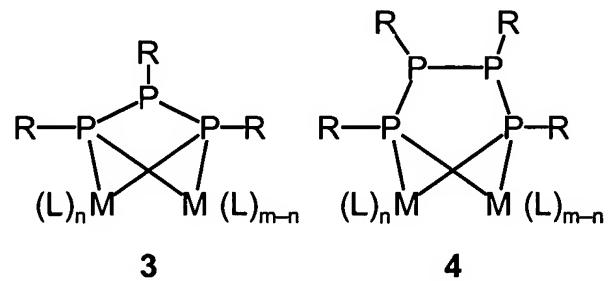
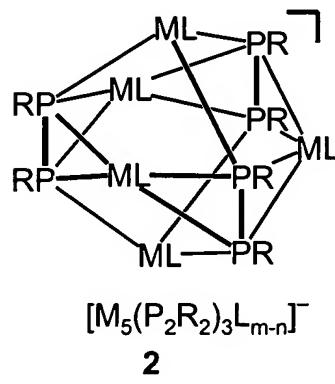
**2. (previously presented)** A process according to claim 1 for preparing a cycloorganylphosphane of **formula I** by reaction of a dihalo(organyl)phosphane of the formula  $R^1PHal_2$  with activated zinc in an ethereal solvent.

**3. (currently amended)** A process according to claim 1 for preparing a cycloorganylphosphane of **formula I** by reaction of a dihalo(organyl)phosphane of the formula  $R^1PHal_2$  with sodium~~an alkali metal or alkaline earth metal~~ in a non-polar organic solvent in the presence of tetramethylethylenediamine~~an activator selected from the group consisting of ethers, polyethers, amines, polyamines, aromatic N-heterocycles and carbonic acid derivatives~~, wherein the ratio by volume of non-polar solvent to tetramethylethylenediamine~~activator~~ is from 10 : 0.1 to 10 : 5.

4. (currently amended) A process according to claim 3 wherein the non-polar organic solvent is toluene and the activator is tetramethylethylenediamine or dimethoxymethane.

5. (previously presented) A process according to claim 1 wherein R<sup>1</sup> is phenyl.

6. (original) A di(alkali metal/alkaline earth metal) oligophosphanediide of the structural formula 2, 3 or 4



wherein

R is C<sub>1</sub>-C<sub>6</sub>alkyl; C<sub>3</sub>-C<sub>6</sub>cycloalkyl, aryl or heteroaryl;

M is Li, Na, K, Cs or Mg;

Hal is F, Cl, Br or I;

L is an activator; and

n and m denote the number of coordinated molecules L, which may be from 1 to 8.

7. (original) A di(alkali metal/alkaline earth metal) oligophosphanediide according to claim 6 wherein R is phenyl and L is tetramethylethylenediamine or 1,2-dimethoxyethane.

**8. (previously presented)** A process for the preparation of a di(alkali metal/alkaline earth metal) oligophosphane diide of formula (2), (3) or (4) according to claim 6 by reaction of a dihalo(organyl)phosphane of the formula  $RPHal_2$ , wherein

R is  $C_1-C_{12}$ alkyl;  $C_3-C_{12}$ cycloalkyl, aryl or heteroaryl,

Hal is F, Cl, Br or I, and

n is a number from 3 to 20,

with an alkali metal or alkaline earth metal in a non-polar organic solvent in the presence of an activator, wherein the molar ratio of alkali metal or alkaline earth metal to  $RPHal_2$  is  $> 1$ .

**9. (previously presented)** A process for the preparation of an organophosphorus compound

by reaction of a di(alkali metal/alkaline earth metal) oligophosphane diide of formula (2), (3) or (4) according to claim 6 with

an alkyl halide, trimethylsilyl chloride, sulfur, an arylcarboxylic acid chloride or trimethylsilyl choride and subsequently a carboxylic acid chloride.

**10. (previously presented)** A process according to claim 2 wherein  $R^1$  is phenyl.

**11. (previously presented)** A process according to claim 3 wherein  $R^1$  is phenyl.